CLAIMS:

WO 2005/084918

1. An adapter for an extrusion apparatus to split the flow of a molten material into a plurality of extrusion pathways, which adapter comprises an input channel, a first output channel, a second output channel and means for adjusting the flow balance between the first output channel and the second output channel.

11

PCT/GB2005/000753

- 10 2. An adapter according to claim 1, in which the adapter comprises means for attachment to an extruder.
- 3. An adapter according to claim 1 or claim 2, in which the flow balance adjusting means is capable of controlling the flow balance to achieve at least a 60:40 split between the first channel and the second channel.
- 4. An adapter according to any preceding claim, in which at the output of the first channel there is provided a first die and the output of the second channel there is provided a second die, wherein the first and second dies differ substantially from one another.
- 5. An adapter according to any preceding claim, in which the flow balance adjusting means comprises a physical block restricting the flow of molten material into a channel.
- 6. An adapter according to any preceding claim, in which the flow balance adjusting means comprises a bellows.

WO 2005/084918 PCT/GB2005/000753

12

- 7. An adapter according to any one of claims 1-5, in which the flow balance adjusting means comprises a pivotable arm.
- 5 8. An adapter according to any one of claims 1-5, in which the flow balance adjusting means comprises magnet means for biasing the flow of a polar molten material.
- 9. An adapter according to any one of claims 1-5, in which the flow balance adjusting means comprises means for selectively adjusting the viscosity of molten fluid flow in a channel.
- 10. An adapter according to claim 9, which the flow balance adjusting means comprises a temperature controlled body configured to adjust the temperature of the molten fluid flow in a channel.
- 11. An adapter according to claim 10, in which the 20 temperature controlled body comprises a belt at least partly about a channel.
- 12. An adapter according to claim 10 or claim 11, in which the temperature controlled body comprises at least one fin projecting into a channel.
 - 13. An adapter according to any one of claims 10-12, in which a temperature controlled fluid is provided to control the temperature of the temperature controlled body.

30

14. An adapter according to any preceding claim, in which the first output channel is vertically spaced from the second output channel.

WO 2005/084918 PCT/GB2005/000753

13

- 15. An adapter according to claim 14, in which the first output channel lies above the second output channel.
- 5 16. An extrusion apparatus comprising an output to split the flow of a molten material into a plurality of extrusion pathways, which output comprises a first output channel, a second output channel and means for adjusting the flow balance between the first output channel and the 10 second output channel.
 - 17. An adapter according to claim 16, in which the first output channel is vertically spaced from the second output channel.

15

- 18. An adapter according to claim 16 or claim 17, in which the first output channel lies above the second output channel.
- 20 19. An adapter according to any one of claims 16-18, in which the output comprises an adapter according to any one of claims 1-15.
- 20. A method of operating an extrusion apparatus according to any one of claims 16-19, which method comprises the steps of adjusting the flow balance adjusting means to balance the flow of molten material between a first dye of the first output channel and a second dye of the second output channel.

30

21. An adapter for splitting the flow of a molten extrudate into a plurality of channels, the first channel having a first output channel and a second channel having

WO 2005/084918 PCT/GB2005/000753

14

- a second output channel, wherein the first output channel is vertically spaced from the second output channel.
- 22. An adapter according to claim 21, in which the first output channel lies above the second output channel.
 - 23. An adapter according to claim 22, in which the adapter is according to any one of claims 1-15.
- 24. An extrusion apparatus comprising an adapter according to any one of claims 21-23.
- 25. An extrusion apparatus according to claim 24, in which the first output channel is above the second output channel.